## **Author Index**

Arnolds, E. Dynamics of macrofungi in two moist heathlands in Drenthe, The Netherlands, 291

Bakker, J.P., see Quené, E. Bik, L., see Bobbink, R. Blom, C.W.P.M. The realism of models in

plant demography, 421

Blom, C.W.P.M. see Van der Sman, A.J.M. Bobbink, R., Bik, L. and Willems, J.H. Effects of nitrogen fertilization on vegetation structure and dominance of *Brachypodium* pinnatum (L.) Beauv. in chalk grassland, 231

Bobbink, R., see Roebertsen, H.

Boesewinkel, F.D. The seed structure and taxonomic relationships of *Hypseocharis* Remy, 111

Bosch, R., see letswaart, J.H. Bredemeijer, G.M.M. and Burg, H.C.J. Peroxidase in variant cell lines of Haplopappus gracilis, 363

Bregman, R. Forms of seed dispersal in Cactaceae, 395

Burg, H.C.J., see Bredemeijer, G.M.M.

Cass, D.D., see Folsom, M.W.
Chatterjee, P., see Ray, S.
Ciampolini, F., see Cresti, M.
Cortizo, M., see Diaz, T.
Cresens, E.M., see Smets, E.F.
Cresti, M., Milanesi, C., Tiezzi, A.,
Ciampolini, F. and Moscatelli, A.
Ultrastructure of Linaria vulgaris pollen
grains, 379

De Nie, H.W., see Jansen, A.E.
Den Nijs, J.C.M., see Roetman, E.
Den Outer, R.W., see Willemse, M.T.M.
De Vries, B.W.L. and Kuyper, Th.W. Effect of vegetation type on decomposition rates of wood in Drenthe, The Netherlands, 307

Diaz, T., Iglesias, I., González, A., Segura, A. and Cortizo, M. Effect of several growth regulators and of aetiolation on chestnut lignification, 533

During, H.J., see Van Tooren, B.F.

Emons, A.M.C. Methods for visualizing cell wall texture, 31Engelmoer, M., see Grootjans, A.P. Ernst, W.H.O. and Van der Ham, N.F.
Population structure and rejuvenation potential of Schoenus nigricans in coastal wet dune slacks. 451

Folsom, M.W. and Cass, D.D. The characteristics and fate of the soybean inner nucellus, 387

Gadella, Th. W.J. Some notes on the origin of polyploidy in *Hieracium pilosella* aggr., 515 González, E., see Diaz, T.

Grootjans, A.P., Hendriksma, P., Engelmoer, M. and Westhoff, V. Vegetation dynamics in a wet dune slack I: rare species decline on the Waddenisland of Schiermonnikoog in The Netherlands, 265

Heil, G.W., see Roebertsen, H.
Hendriksma, P., see Grootjans, A.P.
Heyde, N.M. and Rombach, J. Flower induction in Norflurazon-treated *Pharbitis* nil: photo-induction of photo-periodic sensitivity in seedlings grown in vitro and daylength sensitivity in partly bleached potted plants. 371

Ietswaart, J.H., Bosch, R. and Weeda, E.J. Relationship analyses of the flora of the Dutch, German and Danish Wadden Islands, 95

Iglesias, I., see Diaz, T.

Jansen, A.E. and De Nie, H.W. Relations between mycorrhizas and fruitbodies of mycorrhizal fungi in Douglas fir plantations in The Netherlands, 243

Keijzer, C.J. and Willemse, M.T.M. Tissue interactions in the developing locule of *Gasteria verrucosa* during microgametogenesis. 475

Keijzer, C.J. and Willemse, M.T.M. Tissue interactions in the developing locule of Gasteria verrucosa during microsporogenesis, 493

Klis, F.M., see Samson, M.R. Klis, F.M., see Van den Ende, H.

Kornet, D.J. Conventional and fundamental problems in the delimitation of genera, from a phylogenetic point of view, 527

## **Author Index**

Arnolds, E. Dynamics of macrofungi in two moist heathlands in Drenthe, The Netherlands, 291

Bakker, J.P., see Quené, E. Bik, L., see Bobbink, R. Blom, C.W.P.M. The realism of models in

plant demography, 421

Blom, C.W.P.M. see Van der Sman, A.J.M. Bobbink, R., Bik, L. and Willems, J.H. Effects of nitrogen fertilization on vegetation structure and dominance of *Brachypodium* pinnatum (L.) Beauv. in chalk grassland, 231

Bobbink, R., see Roebertsen, H.

Boesewinkel, F.D. The seed structure and taxonomic relationships of *Hypseocharis* Remy, 111

Bosch, R., see letswaart, J.H. Bredemeijer, G.M.M. and Burg, H.C.J. Peroxidase in variant cell lines of Haplopappus gracilis, 363

Bregman, R. Forms of seed dispersal in Cactaceae, 395

Burg, H.C.J., see Bredemeijer, G.M.M.

Cass, D.D., see Folsom, M.W.
Chatterjee, P., see Ray, S.
Ciampolini, F., see Cresti, M.
Cortizo, M., see Diaz, T.
Cresens, E.M., see Smets, E.F.
Cresti, M., Milanesi, C., Tiezzi, A.,
Ciampolini, F. and Moscatelli, A.
Ultrastructure of Linaria vulgaris pollen
grains, 379

De Nie, H.W., see Jansen, A.E.
Den Nijs, J.C.M., see Roetman, E.
Den Outer, R.W., see Willemse, M.T.M.
De Vries, B.W.L. and Kuyper, Th.W. Effect of vegetation type on decomposition rates of wood in Drenthe, The Netherlands, 307

Diaz, T., Iglesias, I., González, A., Segura, A. and Cortizo, M. Effect of several growth regulators and of aetiolation on chestnut lignification, 533

During, H.J., see Van Tooren, B.F.

Emons, A.M.C. Methods for visualizing cell wall texture, 31Engelmoer, M., see Grootjans, A.P. Ernst, W.H.O. and Van der Ham, N.F.
Population structure and rejuvenation potential of Schoenus nigricans in coastal wet dune slacks. 451

Folsom, M.W. and Cass, D.D. The characteristics and fate of the soybean inner nucellus, 387

Gadella, Th. W.J. Some notes on the origin of polyploidy in *Hieracium pilosella* aggr., 515 González, E., see Diaz, T.

Grootjans, A.P., Hendriksma, P., Engelmoer, M. and Westhoff, V. Vegetation dynamics in a wet dune slack I: rare species decline on the Waddenisland of Schiermonnikoog in The Netherlands, 265

Heil, G.W., see Roebertsen, H.
Hendriksma, P., see Grootjans, A.P.
Heyde, N.M. and Rombach, J. Flower induction in Norflurazon-treated *Pharbitis* nil: photo-induction of photo-periodic sensitivity in seedlings grown in vitro and daylength sensitivity in partly bleached potted plants. 371

Ietswaart, J.H., Bosch, R. and Weeda, E.J. Relationship analyses of the flora of the Dutch, German and Danish Wadden Islands, 95

Iglesias, I., see Diaz, T.

Jansen, A.E. and De Nie, H.W. Relations between mycorrhizas and fruitbodies of mycorrhizal fungi in Douglas fir plantations in The Netherlands, 243

Keijzer, C.J. and Willemse, M.T.M. Tissue interactions in the developing locule of *Gasteria verrucosa* during microgametogenesis. 475

Keijzer, C.J. and Willemse, M.T.M. Tissue interactions in the developing locule of Gasteria verrucosa during microsporogenesis, 493

Klis, F.M., see Samson, M.R. Klis, F.M., see Van den Ende, H.

Kornet, D.J. Conventional and fundamental problems in the delimitation of genera, from a phylogenetic point of view, 527 Kouwets, F.A.C. New and noteworthy desmid zygospores from South-West France, 63

Kuyper, Th.W., see De Vries, B.W.L.

Kwak, M.M. Pollination ecology and seed-set in the rare annual species *Melampyrum* arvense L. (Scrophulariaceae), 153

Milanesi, C., see Cresti, M.
Mol, P.C., Vermeulen, C.A. and Wessels,
J.G.H. Glucan-glucosaminoglycan linkages
in fungal walls, 17
Moscatelli, A., see Cresti, M.

Musgrave, A., see Van den Ende, H.

Olesen, J.M. Floral biology of the Canarian Echium wildpretti: bird-flower or a water resource to desert bees? 509

Pegtel, D.M., Germination in declining and common herbaceous plant populations cooccurring in an acid peaty heathland, 215

Pijnacker, L.P. and Schotsman, H.D. Nuclear DNA amounts in European Callitriche species (Callitrichaceae), 129

Quené, E. and Bakker, J.P. Effects of nature management practices on the bryophyte flora of grassland and heathland in Drenthe, The Netherlands, 203

Ray, S. and Chatterjee, P. Cytotaxonomical study of west Bengal Charophyta: a new chromosome number count of *Nitella* stuartii and its karyotype, 523

Rhebergen, L.J., Theeuwen, J.P.J.J. and Verkleij, J.A.C. The clonal structure of Festuca rubra in adjacent maritime habitats, 467

Roebertsen, H., Heil, G.W. and Bobbink, R. Digital picture processing: a new method to analyse vegetation structure. 187

Roetman, E., Den Nijs, J.C.M. and Sterk, A.A. Distribution and habitat range of diploid, sexual dandelions (*Taraxacum* section *Vulgaria*), a Central European flora element in The Netherlands, 81

Rombach, J., see Heyde, N.M.

Rosén, E. Development and seedling establishment within a *Juniperus communis* stand on Öland, Sweden, 193

Samson, M.R., Klis, F.M. and Van den Ende, H. Cysteine as a fusion inhibitor in the sexual mating reaction of the green alga Chlamydomonas eugametos, 351

Scheper, E., see Sýkora, K.V.

Schotsman, H.D., see Pijnacker, L.P.

Segura, A., see Diaz, T.

Senn-Irlet, B. Macromycetes in alpine snowbed communities—mycocoenological investigations, 251

Sietsma, J.H. and Wessels, J.G.H. Total inhibition of wall synthesis by 2-deoxyglucose and polyoxin D in protoplasts of Schizophyllum commune, 23

Smets, E.F. and Cresens, E.M. Types of floral nectaries and the concepts 'character' and 'character-state'—a reconsideration, 121

Sterk, A.A., see Roetman, E.

Sýkora, K.V., Scheper, E. and Van Der Zee, F. Inundation and the distribution of plant communities on Dutch river dikes. 279

Theeuwen, J.P.J.J., see Rhebergen, L.J. Tiezzi, A., see Cresti, M. Tinhout, A. and Werger, M.J.A. Fine roots in a dry Calluna heathland, 225

Van Andel, J., Wesselingh, R.A. and Van Donk, H.J. The performance of progeny groups from two populations of *Phyteuma nigrum*, with particular reference to the chance of survival or extinction, 165

Van den Ende, H., Klis, F.M. and Musgrave, A. The role of flagella in sexual reproduction of *Chlamydomonas eugametos*, 327

Van den Ende, H., see Samson, M.R.

Van der Ham, N.F., see Ernst, W.H.O.

Van der Knaap, W.O. Age and stability of bird-manured vegetation on Spitsbergen, 171

Van der Sman, A.J.M., van Tongeren, O.F.R. and Blom, C.W.P.M. Growth and reproduction of *Rumex maritimus* and *Chenopodium rubrum* under different waterlogging regimes, 439

Van der Zee, F., see Sýkora, K.V.

Van Donk, H.J., see Van Andel, J.

Van Lammeren, A.A.M. Observations on the structural development of immature maize embryos (*Zea mays* L.) during *in vitro* culture in the presence or absence of 2,4-D, 49

Van Tooren, B.F. and During, H.J. Viable plant diaspores in the guts of earthworms, 181 Van Tongeren, O.F.R., see Van der Sman, A.J.M.

Verkaar, H.J. Are defoliators beneficial for their host plants in terrestrial ecosystems—a review?, 137

Verkleij, J.A.C., see Rhebergen, L.J. Vermeulen, C.A., see Mol, P.C.

Weeda, E.J., see letswaart, J.H.
Werger, M.J.A., see Tinhout, A.
Wesselingh, R.A., see Van Andel, J.
Wessels, J.G.H. A steady-state model for apical wall growth in fungi, 3
Wessels, J.G.H., see Mol, P.C.
Wessels, J.G.H., see Sietsma, J.H.

Westhoff, V., see Grootjans, A.P.

Willems, J.H. Soil seed bank and regeneration of a Calluna vulgaris community after forest clearing, 313

Willems, J.H., see Bobbink, R.

Willemse, M.T.M. and Den Outer, R.W. Stem anatomy and cell wall autofluorescence during growth of three maize (*Zea mays L.*) cultivars, 39

Willemse, M.T.M., see Keijzer, C.J.

Zeven, A.C. Flower colour of two forms of Brassica oleracea in the sixteenth century, 531

## Key-word Index

Actinotaenium, 63
aetiolation, 533
agaricales, 251
age distribution, 193
agglutination, 327
alpine zone, 251
anatomy, 39
anemochory, 395
Antennaria dioica, 215
anther, 475, 493
anther dehiscence, 475
apical growth, 3
Arnica montana, 215
Arrhenatherion, 279
autofluorescence, 39

bird cliff, 171

Brachypodium pinnatum, 231

Brassica oleracea, 531

bryophyte flora, 203

bryophytes, 181

bumblebees, 153

Callitriche, 129 callose, 493 Calluna vulgaris, 225,313 callus, 49 campylotrophy, 111 Canary Isles, 509 Castanea hybrids, 533 cell culture, 363 cell fusion, 351 cellulose microfibril, 31 chalk grasslands, 231 character, 121 character state, 121 Chenopodium rubrum, 439 chitin, 3 Chlamydomonas, 351 chromosomes, 129 clonal structure, 467 compensatory (re)growth, 137 conservation, 193 Cosmarium, 63 crop evolution, 531 crop history, 531 cytogeography, 81 cytoskeleton, 379 cytotaxonomy, 523

2,4-D, 49 Dactylorhiza incarnata, 265 decalciphication, 265 decomposition, 307 defoliation, 137,451 DNA amount, 129 2-deoxyglucose, 23 desmid zygospores, 63 diaspore bank, 181 differentiation, 467 digital picture processing, 187 dike vegetation, 279 discomycetes, 251 dominance, 231 dry cleaving, 31 dune slack, 265

earthworms, 181
Echium wildpretti, 509
ecology, 421
ectomycorrhiza, 243
endothecium, 475
Epipactis palustris, 265
Equisetum fluviatile, 31
evolutionary theory, 527
exotegmen, 111

fecundity, 165 ferns, 181 Festuca rubra, 467 Filago minima, 215 fine roots, 225 flagellum, 327 flora, 95 floral nectary types, 121 flower colour, 531 flower-induction, 371 fluctuations, 291 freeze-fracturing, 31 freeze substitution, 31 frequency, 243 fruitbody diversity, 243 fungal cell wall, 3 fungal hypha, 3 fungal walls, 17 fungi, 243

Galium saxatile, 215 Geraniaceae, 111 germination, 215,451 glucan, 17 β-glucan, 3 glucosaminoglycan, 17 glycoproteins, 327 Glyphipteryx schoenicolla, 451° grassland, 203 green algae, 327 growth, 363,439

habitat range, 81

Haplopappus gracilis, 363
heathland regeneration, 313
heathlands, 203,291
heliciodal cell wall, 31
herbivory, 137,451
heterotrophic culture, 371
Hieracium pilosella aggr., 515
hydrochory, 395

inundation, 279

juniper scrub, 193

Juniperus communis, 307

karyotype, 523

lignification, 533 lignin, 39 Linaria vulgaris, 379

macrofungi, 291
maize, 39
megagametogenesis, 387
meiosis, 493
Melampyrum arvense, 153
Mesobromion, 279
models, 421
mycocoenology, 251
mycofloristic composition, 307
mycorrhiza, 243

Narda stricta, 215
nature management, 203
nectar, 153
nectar secretion, 509
nectaria cauda, 121
nectaria persistentia, 121
Nitella, 523
nitrogen and phosphorous economy, 231
nitrogen concentration, 225
nitrogen fertilization, 231
norflurazon, 371
nucellus, 387
nutrition, 387

ovule, 387 Oxalidaceae, 111

palynology, 171 peat formation, 171 Pedicularis palustris, 265 periodicity, 291 permanent plots, 265 peroxidase, 363 phenolics, 39 phenols, 363 phylogeny, 129, 527 physiological and morphological responses, 137 Phyteuma nigrum, 165 phytochrome action, 371 phytohormones, 533 Pinus sylvestris, 307 plant demography, 421 pollen, 379,475 pollen dispersal, 475 pollination, 153,509 polyoxin D. 23 polyploidy, 515 population, 467 population size, 165 protoplasts, 23

Querceto petraeae-Betuletum, 313 Quercus robur, 307

regeneration, 193 relationship analyses, 95 reproduction, 439 robbery, 153 Rumex maritimus, 439

Schizophyllum commune, 3,23 Schoenus nigricans, 265,451 seed anatomy, 111 seed bank, 181,313 seed morphology, 395 seed production, 153 sexuality, 327 sexual mating, 351 short-day photoperiodism, 371 shrub expansion, 193 size inequality, 165 snow-bed communities, 251 South-West France, 63 soybean, 387 stand age, 243 structure, 49

succession, 243,291 suspension culture, 49 systematics, 527

tapetum, 475,493 *Taraxacum* section *Vulgaria*, 81 tissue interaction, 475,493

unreduced gametes, 515

validation, 421 vegetation, 95,137,171 vegetation structure, 187,231 Viola canina, 215

Wadden Islands, 95 wall growth, 3 wall synthesis, 23 waterlogging, 439 wet dune slacks, 451

Zea, 49 zoochory, 395